

Call for Papers

Map2MPSoC/SCOPES

May 15-16, 2012, Schloss Rheinfels, St. Goar, Germany
<http://www.scopesconf.org>

The workshop on Software and Compilers for Embedded Systems (SCOPES) and the workshop on Mapping of Applications to MPSoCs (Map2MPSoC) will organize a joint Map2MPSoC/SCOPES workshop in 2012.

The Map2MPSoC/SCOPES workshop will feature a combination of research papers and research presentations (details see below). The research papers will also be published in the ACM digital library. The workshop will be held in cooperation with ACM SIGBED and EDAA.

AIM AND SCOPE

The influence of embedded systems is constantly growing. Increasingly powerful and versatile devices are developed and put on the market at a fast pace. Their functionality and number of features is increasing, and so are the constraints on the systems concerning size, performance, energy dissipation and timing predictability. To meet all these constraints, multi-processor systems on a chip (MPSoCs) are becoming popular in embedded systems. In order to meet the performance and energy constraints of embedded applications, heterogeneous architectures incorporating functional units optimized for specific functions are commonly employed. This technological trend has dramatic consequences on the parallelization, mapping, compiler and design technology used to develop these systems.

The Map2MPSoC/SCOPES workshop focusses on the software generation process for modern embedded systems. Topics of interest include all aspects of the compilation and mapping process of embedded single and multi-processor systems. This includes (but is not limited to):

- models of computation and programming languages;
- performance analysis techniques for models of computation;
- automatic code parallelization techniques;
- mapping and scheduling techniques for embedded multi-processor systems;
- code generation techniques for embedded single and multi-processor architectures;
- design-space exploration techniques for use in the HW/SW codesign process;
- techniques to exploit the dynamic behavior in embedded applications;
- interactions between operating systems and compilation techniques;
- techniques for compiler aided profiling, measurement, debugging and validation of embedded software.

WORKSHOP STRUCTURE

The workshop structure (presentations followed by intensive discussions) allows for an interactive atmosphere in which industrial and academic representatives can exchange new ideas and trends in the area MPSoC mapping and code generation.

VENUE

The workshop will take place in the beautiful "Schloss Rheinfels"

hotel at St. Goar, Germany. Schloss Rheinfels is a castle at one of the nicest places within the Rhine valley, itself a world heritage site. Among a set of hotels focusing on wellness, the hotel was voted the #1 hotel within Germany in 2007. There is a beautiful view from the hotel onto the river Rhine. See <http://www.schloss-rheinfels.de> for more information about the hotel (unfortunately, only in German).

SUBMISSION INSTRUCTIONS

Map2MPSoC/SCOPES accepts two types of submissions:

Research papers

Research papers should present original research results not published or submitted for publication in other forums. Accepted papers will be published via the ACM digital library and they will be scheduled for a presentation during the workshop. Research papers should not exceed 10 pages in ACM format (single-spaced, 2 columns, 9pt font; for instructions visit the ACM website <http://www.acm.org/sigs/publications/proceedings-templates>). Papers must be submitted in PDF format using the Map2MPSoC/SCOPES paper submission website. To permit blind review, submissions should not include the author names.

Research presentations

Research presentations should present research results relevant to the topics addressed by the workshop. These presentations may be based on research results that have previously been presented in other forums. Research presentations do not include a publication in the Map2MPSoC/SCOPES proceedings. Accepted research presentations will be scheduled for a presentation during the workshop. Authors that are interested in giving a research presentations at the Map2MPSoC/SCOPES 2012 workshop should submit a 2 page abstract in ACM format (single-spaced, 2 columns, 9pt font; for instructions visit the ACM website <http://www.acm.org/sigs/publications/proceedings-templates>). Abstracts must be submitted in PDF format using the Map2MPSoC/SCOPES paper submission website. Author names should be included on these abstracts.

IMPORTANT DATES

Research papers

Full research paper submission: (hard deadline)	Feb 28, 2012
Notification of acceptance:	Mar 19, 2012
Final paper submission:	Apr 2, 2012

Research presentations

Abstract submission research presentations:	Apr 1, 2012
Notification of acceptance:	Apr 2, 2012

GENERAL CHAIR

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